Subject: - Tender for "Design, Construction, Supply, Transportation, Installation, Testing and Commissioning of HDPE pontoons along with gangways for providing floating terminal facilities at various locations on NW-1 (Ganga-Bhagirath)"

Reference: - Tender No.: - IN-IWAI-295764-GO-RFB

CPP Portal Tender ID: -2022_JMVP_'693758_1

S. No.	Page no & Clause. No	Content of the RFP requiri clarifications/amendment			Clarifications/ Amendments Sought	Response by IWAI
1.	Part -3 Section- VIII Clause 16.1(ii)(d) Page 123	S. No.	Milestones / Key Deliverables	Payment Schedule (to be paid on pro- rata basis) – Nine (09) Nos. of Pontoons and twenty two (22) Nos. of Gangways		Tender Conditions prevail. Since in other way the delay in gangway supply may delay in setting up of steel pontoon system also. Both the works are in the same cluster hence activities are to be synchronized. Except Defect liability other
		(a) (b)	Submission and approval of final detailed design (approved by classification society/ agency/ institute & EIC) along with sectional drawings (Good for Construction (GFC) drawings), work plan & methodology with updation/ modifications, if any Procurement of all the components along with accessories & fabrication of the same in the manufacturing site	5% 50%		payments are separate.

Response to Pre-submission queries of the Bidders

S. No.	Page no & Clause. No	Content of the RFP requiring clarifications/amendments	Clarifications/ Amendments Sought	Response by IWAI
		(c) Transportation of pontoon and 20% gangway from place of manufacturing to the respective site		
		(d) Installation of pontoon and 15% gangway along with accessories including on-site inspection by classification society/ agency/ institute and EIC		
		 (e) Testing & commissioning of the pontoon and gangway for successful operation Note: For the thirteen (13) nos. of HDPE floating gangways to be installed along with the steel pontoons, the payment shall be made subject to the provisions of GCC 28.3 of Section IX: Special Conditions of Contract) 		
2.	Part-2, Section VII, Clause 7.2 (b) Page -83	" Submission and approval of final detailed design (approved by classification society/ agency/ institute & EIC) along with sectional drawings (Good for Construction (GFC) drawings), work plan & methodology with updating/ modifications, if any"	made $D + 60$ days.	Tender Conditions prevail.
3.	Part-2, Section VII, Clause 7.2 (b) Page -84	"(a) The Supplier shall during the execution of works adhere to the delivery and completion schedule set forth for the works so as to ensure the completion of the works within the stipulated duration. Failure to achieve the milestones within the stipulated duration would attract Liquidated Damages as defined in SCC.	award date as IRS and other approval takes lot of time.	Tender Conditions prevail.

S. No.	Page no & Clause. No		Content of the RFP requir clarifications/amendmen		Clarifications/ Amendments Sought	Response by IWAI
		S. No.	Milestones / Key Deliverables	Time Schedule from D=Date of signing of Contract (Nine (09) Nos. of pontoons and twenty-two (22) Nos. of gangways)		
		1.	Submission and approval of final detailed design (approved by classification society/ agency/ institute & EIC) along with sectional drawings (Good for Construction (GFC) drawings), work plan & methodology with updation/modifications, if any	D+30 days		
		2.	Procurement of all the components along with accessories & fabrication of the same in the manufacturing site	D+2 months		
		3.	Transportation of pontoon and gangway from place of manufacturing to the respective site	D+4 months		
		4.	Installation of pontoon and gangway along with accessories including on-site inspection by classification society/ agency/ institute and EIC	D+5 months		

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		5. Testing & commissioning of the pontoon and gangway for successful operation (also refer GCC 28.3 of Section IX: Special Conditions of Contract)		
		Note: General Upkeep & Maintenance period of twenty- four (24) months from the date of fabrication, supply, installation, testing and commissioning as per the Contract and final handing over to the satisfaction of Purchaser		
		Note: The Supplier shall provide all the relevant documents pertaining to warranty/ guarantee for all the components & accessories before handing over of the pontoons and gangways."		
4.	Section – IV Price Schedule Pg. 61	"provision for lighting arrangement, lifesaving appliances (lifebuoys and life jackets), complete in all respect including inspection and certification by IRS or any other recognized organization and as per the terms & conditions of the Contract"	Total quantity of life Buoy and life jacket for each 15 x 4.5 Mtr pontoon is not provided, this needs to be indicated for all bidders to quote on even ground.	Minimum: i) Life Buoys: 5 nos. ii) Life Jacket: 5 nos.
5.	Part-2 Technical Specification Clause 2 Page:90	"Additional arrangements: Four (4) numbers of standalone Mild Steel (MS) structure to counter the berthing impact of the boat. The floating pontoon shall be equipped with 30m lifeline rope and at least two (2) first aid kits. All items shall be provided in appropriate storage box painted red with lock and key and fastened to the floating pontoon and the same shall be as approved by the EIC. The floating pontoon shall be equipped with PVC roofing with structural design approved by IIT/NIT."	It is not understood what is required by reading "4 number of standalone mild structure to absorb berthing impact" drawing is required to understand this clearly and where this has to be constructed / integrated with pontoon system.	The Clause may be read as "Additional arrangements: The floating pontoon shall be equipped with 30m lifeline rope and at least two (2) first aid kits. All items shall be provided in appropriate storage box painted red with lock and key and fastened to the floating pontoon and the same shall be as approved by the EIC.

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				The floating pontoon shall be equipped with PVC roofing with structural design approved by IIT/NIT."
6.	Part-2 Technical Specification Clause 2 Page:90	"The floating pontoon shall be equipped with PVC roofing with structural design approved by IIT/NIT"	Tensile structure (vertical structure in MS for securing tensile fabric part) details / drawing is not provided – proper dimensions and technical details should be provided as this needs to be approved from IIT / NIT – details are essential for all bidder to be on even ground.	Tender Conditions prevail. The supplier shall design the PVC roofing arrangements considering the safety and stability as per the size of HDPE pontoon. The supplier shall get the structural design approved by IIT/NIT.
7.	Part-2 Technical Specification Clause 4 (a) Page:91	" The gangway shall be provided in such a manner so that one end is properly anchored/ secured on the pontoon with pivot and another end has roller below it. An aluminum chequered plate shall be"	Anchoring of pontoon and gangway is to be done with rope and sinkers or with chain and sinkers – no details provided, also no depth data provided with water level variation.	Anchoring of Pontoon and gangway is to be done with rope and sinkers. Water level variation is mentioned in general upkeep section and depth data shall be provided to successful bidder.
8.	Part-3 Section- VII, Clause 2 , Pg. 81	"Note: The aforesaid locations are tentative only and may change as per the change in the morphology of the river at the time of setting up of the pontoons and gangways at the respective locations in Bihar and Jharkhand on NW-1."	All Location coordinates should be provided to understand the location details.	Please refer foot note at Clause 2 of Part-3 Section VII in this regard. Exact location shall be shared with the successful bidder.
9.	Part -3 Section- VIII Clause 28.3 Page 127	"During the defect liability period/warranty period of two (2) years, the Supplier shall also be responsible for round the clock General Upkeep and Maintenance of nine (9) nos. of offshore jetty units i.e., HDPE pontoons and gangways in Bihar as per clause 14 of Section VII, Part 2: Supply Requirement".	Kindly confirm the general upkeep and maintenance of nine (9) nos. of offshore jetty units i.e., HDPE pontoons and gangways in Bihar is to be undertaken within defect liability period of 02 years only from date of handover. Bidder won't be responsible for any kind of liability that arises after 02 years of handing over the work to EIC.	Tender Conditions prevail. Since in other way the delay in gangway supply may delay in setting up of steel pontoon system also. Both the works are in the same cluster hence activities are to be synchronized.

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10.	Part-3 Section- VIII Clause 28.3 Page 127	"Note: Subject to clause 7.1 of Section VII, Part 2: Supply Requirement, the commissioning of thirteen (13) nos. of HDPE gangways, to be fitted along with the steel pontoons, shall commensurate with the commissioning of steel pontoons (thirteen (13) nos.) (to be supplied through a separate contract)".	Steel pontoon and HDPE pontoon are 02 different work for which tender is floated by IWAI. The work and the payment towards commissioning of thirteen (13) nos. of HDPE gangways should not be linked with the steel pontoons, as there is a possibility that HDPE gangway supplier may finish his work first and would not like to wait for steel pontoon supplier for commissioning of steel pontoons which will cause delay in work completion of HDPE gangway supplier. Payment and Work completion for HDPE gangway should be accounted separately.	Tender Conditions prevail. Since in other way the delay in gangway supply may delay in setting up of steel pontoon system also. Both the works are in the same cluster hence activities are to be synchronized. Except Defect liability other payments are separate.
11.	Part-2 Section- VII Page No: 89 Technical specs	"Rubber fenders/ Heavy duty HDPE fenders. All labour, materials, tools & plant etc. complete."	HDPE fenders and Aluminium side basrs for safety of pontoon: HDPE 3 lugs fender can be used on the sides of pontoon along with aluminum side bars for holding the system together. This will also help and save the floating pontoon from getting damaged by hitting the shores and boats.	Tender Conditions Prevail
12.	Part-2 Section VII Page No: 89 Technical Specifications (Sno., 13)	"Handrails: Fabricated out of MS powder coated pipes, 1.0m high. Reflective stickers to be provided around the vertical members"	We suggest GI material in place of MS powder coated for more life & durability.	The clause may be read as <i>"Handrails: Fabricated out of</i> <i>MS pipe with anti-corrosive</i> <i>paints, 1.0m high. Reflective</i> <i>stickers to be provided around</i> <i>the vertical members"</i> Minimum of 6.0 mm connecting plates to be provided in way of handrail supports. Size of handrail supports. Size of handrail supporting sections to be 72x72x4.8 SHS connected to 80x40x4 RHS. The designed may be improved as per requirement and in compliance to Class norms.

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13.	Part-2 Section VII Page No: 90 Clause: 2	"The floating pontoon shall be equipped with PVC roofing with structural design approved by IIT/NIT."	PVC Roofing can be blown away with the wind affecting the whole floating jetty system in case there is a very heavy wind or cyclone. So, the O&M of this PVC Roofing is very difficult and so we request you to kindly remove the O&M and upkeep from bidders' cost and cover this under insurance as the cost of fixing a new PVC Roofing in case of damage will be too much for a bidder and we cannot consider the cost as it can be affected multiple times due to cyclonic winds which is considered as Force Majeure.	Tender Conditions prevail. The supplier shall design the PVC roofing arrangements considering the safety and stability as per the size of HDPE pontoon. The supplier shall get the structural design approved by IIT/NIT.	
14.	Part-2 Section VII Page No: 94,95 General layouts		Kindly clarify the project diagram given on Page No 94 & 95. As the diagrams should be of HDPE pontoon & not of Steel pontoon.	With ref to the layout given at Pg. 95 the steel pontoon with 24x6x1m size may be read as HDPE pontoon 15x4.5x.8, refer technical specification Pg. 89.	
15.	Part-3 Section IX Page No: 122 Clause 12.5 &	" twenty-two (22) floating gangways of suitable steel enveloped HDPE floating material (9m length x 2m width) (including additional ramp gangways of MS steel steel (3m x 1.5m) to govern the height difference between steel pontoon and floating gangway) including"	We suggest marine grade Aluminum material instead of MS for more life & durability.	Tender Conditions Prevail.	
16.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 2)	HDPE (High-density polyethylene)	 The material used to be of virgin grade having followed parameters. 1. The finished product to have Melt Flow Index of 3.0 g/10min (+-20%) at 21.6 kg load at 10min. 	The Floating Pontoons to be made up of 100 % Virgin high density polyethylene and should be 100% recyclable & Non-Polluting.	
			2. The finished product to have Tensile Strength to be more than 20 MPa.	MFI (g/10 Density min) (G/cc)	
			The supplier should submit Test Certificate of the HDPE dock confirming to above specifications from CIPET, a Central Govt. Laboratory specializing in plastic materials.	1.20 0.954	
				0.45 0.952	
				0.25 0.952	

S. No.	Page no & Clause. NoContent of the RFP requiring clarifications/amendments		Clarifications/ Amendments Sought	Response by IWAI
			The top surface to have a groove of 3" x 2" size for laying the framework for MS frames.	Lug thickness: 22mm +/- 10% (tolerance)
				Tensile Strength: 40.0 Mpa (ASTM D638 Method)
17.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 3)	"HDPE cubes of size 50cm x 50cm x 40cm having proper interlocking arrangement."	Weight of each to be mentioned to ensure proper wall thickness. Weight: min. 7 kgs.	Tender Conditions Prevail.
18.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 5)	"Aluminum chequered flooring and as approved by EIC"	Aluminium Floor Thickness: min. 2mm. Material test certificate and ISI approval from the Manufacturer to be submitted	The clause may be read as "Aluminum chequered flooring having a thickness of 4 mm and as approved by EIC"
19.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 8)	"MS hot dip galvanized"	The Size & Thickness of Galvanized MS Frames pipes to be minimum 60mm x 40mm and 2.9mm thick, ISI marked. The frame to have grid of 0.5m x 0.5m over which the aluminium flooring is to be laid. The top and bottom frame to be connected by 80mm x 40mm 2.9mm thick vertical members at every 0.5m.	Tender Conditions Prevail.
20.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 9)	"All fasteners/ connectors shall be of same material, as of module/ block for HDPE items or suitable material"	The HDPE Cube / Dock connector lug to be min. 22mm thick to ensure strength.	Tender Conditions Prevail.
21.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 13)	"Fabricated out of MS powder coated pipes, 1.0m high. Reflective stickers to be provided around the vertical members"	The dimensions of handrails should be provided. Suggested specifications: Handrails made from ISI approved MS round hollow sections. The vertical member to be made from 2" B class equivalent pipe of height 1m and the distance between two consecutive vertical members to be 1m. There should be 4 layers of horizontal members between the two vertical ones made from 1.25" ISI B class approved MS pipes	The clause may be read as "Handrails: Fabricated out of MS pipe with anti-corrosive paints, 1.0m high. Reflective stickers to be provided around the vertical members" Minimum of 6.0 mm connecting plates to be

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				provided in way of handrail supports. Size of handrail supporting sections to be 72x72x4.8 SHS connected to 80x40x4 RHS.
				The design may be improved as per requirement and in compliance to Class norms.
22.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 15)	"Rubber fenders/ Heavy duty HDPE fenders. All labour, materials, tools & plant etc. complete."	HDPE Fenders are only meant for small boats such as pedal boats. They shall not be useful for bigger boats, especially motorboats. The HDPE Fenders are also small and do not provide overall protection. Also, please mention the quantity of fenders to be provided with each jetty Suggested: 8nos. D shaped Rubber fenders of 125 mm thickness and 1m length, each fixed vertically.	The Clause may be read as "D-Shaped Rubber fenders/Heavy duty HDPE fenders. All labour, Materials, tools & plant etc. complete. Necessary fenders shall be provided to counter berthing impact of boat."
23.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 16)	"The floating pontoon shall be equipped with a solar powered flashing beacon (white/ yellow flashes of 22-30 flashing per minute) as approved by the EIC"	Suggested quantity of Solar light: 20nos.	Tender Conditions Prevail.
24.	Part-2 Technical Specification Clause 2 Page:90	"Four (4) numbers of standalone Mild Steel (MS) structure to counter the berthing impact of the boat. The floating pontoon shall be equipped with 30m lifeline rope and at least two (2) first aid kits. All items shall be provided in appropriate storage box painted red with lock and key and fastened to the floating pontoon and the same shall be as approved by the EIC."	Structure Details: The PVC roofing structure to cover entire jetty area of 15m x 4.5m. The structure to have minimum 4" vertical columns Made from MS Pipe at regular intervals. The roof frame structure to be made from 3" MS pipe and 2.5" MS pipe members with a louver at top for ventilation. The PVC fabric to be High Tensile PVC fabric to ensure strength and durability.	The Clause may be read as "Additional arrangements: The floating pontoon shall be equipped with 30m lifeline rope and at least two (2) first aid kits. All items shall be provided in appropriate storage box painted red with lock and key and fastened to the floating pontoon and the

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				same shall be as approved by the EIC.
				The floating pontoon shall be equipped with PVC roofing with structural design approved by IIT/NIT."
25.	Part-2 Technical Specification Clause 3 Page:90	Approach trestle / gangway: Breadth Overall: At least. 2.0m Length (approx.): Approx. 9m (3mX3 piece(s)) Free Board Minimum: 50% of floating gangway base shall be above water at all times	HDPE Cube Material & MS Frames: The specifications of HDPE Cube material and Galvanized MS Framework to be of same specifications as that of the jetty.	Tender Conditions Prevail.
26.	Part-2 Technical Specification Clause 4 (a) Page:90	(b)The gangway shall be equipped with a solar powered flashing beacon (white / yellow flashes of 22 - 30 flashing per minute) as approved by the EIC to ensure night operations	Each Section to have 2 nos. beacons.	Tender Conditions Prevail.
27.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 2)	"Approx. 15m x 4.5m (hot dip galvanized steel enveloped double layered HDPE Pontoon). Aluminum matting to be done suitably".	What is the thickness of aluminium Matting? It should be min. 2mm.	The Clause may be read as "Approx. 15m x 4.5m (hot dip galvanized steel enveloped double layered HDPE Pontoon). Aluminum matting of 4mm thickness to be done suitably"
28.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 2)	HDPE (High-density polyethylene)	HDPE has many grades and with this specifications, even lower grade HDPE can be used by a supplier to cut costs. We request you to provide following minimum criteria so that Virgin grade HDPE is used in the floats:1. Tensile strength.	The Floating Pontoons to be made up of 100 % Vergin high density polythene and should be 100% recyclable & Non- Polluting.
			2. Melt Flow Rate	MFI (g/10 Density min) (G/cc)

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			3. Density	1.20	0.954	
			The typical values for three parameters in a HDPE cube are;	0.45	0.952	
			1. Tensile Strength at yield: 22 MPa	0.25	0.952	
			2. Melt Flow Rate of 3.5 g/10min (+- 10%) at 21.6 kg load at 10min. lower the Melt Flow Rate, better is the material.	Lug thickn (tolerance)	ess: 22mm +/	- 10%
			3. Density: 0.952 g/cc.		rength: 40.0 538 Method)	Mpa
			To ensure quality, you should ask the bidder for test reports issued by CIPET in the Technical bid.			
29.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 3)	"HDPE cubes of size 50cm x 50cm x 40cm having proper interlocking arrangement."	The weight of each module is not mentioned. It should be at least 7 kgs. For sufficient strength	Tender Co	nditions Preva	ul.
30.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 5)	"Aluminum chequered flooring and as approved by EIC"	The min. recommended thickness is 2mm. Further, it should be ISI approved.	"Aluminum flooring ha	e may be re a cheq aving a thickn d as approve	uered ess of
31.	Part-2 Section VII Page No: 89 Technical Specifications	"MS hot dip galvanized"	The size of the pipes for the frames must be mentioned as it has financial implications. Generally, such MS frames for jetty are made from 60mm x 40mm	Tender Co	nditions Preva	ul.
	(Sno, 8)		2.9mm IS grade MS rectangular pipes for longevity.			
32.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 8)	"All fasteners/ connectors shall be of same material, as of module/ block for HDPE items or suitable material"	The HDPE Module lug thickness needed. Generally, it is 22mm thick so that it can sustain high stresses.	Tender Co	nditions Preva	ul.

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33.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 8)	"Fabricated out of MS powder coated pipes, 1.0m high. Reflective stickers to be provided around the vertical members"	Please provide the design of MS handrails with material diameter and thickness, as we shall have to consider the same to calculate our costs.	The clause may be read as "Handrails: Fabricated out of MS pipe with anti-corrosive paints, 1.0m high. Reflective stickers to be provided around the vertical members"
				Minimum of 6.0 mm connecting plates to be provided in way of handrail supports. Size of handrail supporting sections to be 72x72x4.8 SHS connected to 80x40x4 RHS.
				The designed may be improved as per requirement and in compliance to Class norms.
34.	Part-2 Section	"Rubber fenders/ Heavy duty HDPE fenders. All labour,	Please provide the quantity and dimensions of rubber fenders to be supplied with each jetty. For motorized and heavy boats, D shaped	The Clause may be read as
	VII Page No:materials, tools & plant etc. complete."89 TechnicalSpecifications(Sno, 8)	rubber fenders are used on jetties.	"D-Shaped Rubber fenders/Heavy duty HDPE fenders. All labour, Materials, tools & plant etc. complete.	
				Necessary fenders shall be provided to counter berthing impact of boat."
35.	Part-2 Section VII Page No: 89 Technical Specifications (Sno, 8)	"The floating pontoon shall be equipped with a solar powered flashing beacon (white/ yellow flashes of 22-30 flashing per minute) as approved by the EIC"	How many blinkers are to be provided	Tender Conditions Prevails
36.	Part-2 Technical	<i>"Four (4) numbers of standalone Mild Steel (MS) structure to counter the berthing impact of the boat.</i>	Please provide a tentative design of the PVC structure and the dimensions	The Clause may be read as

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	Specification Clause 2 Page:90	The floating pontoon shall be equipped with 30m lifeline rope and at least two (2) first aid kits. All items shall be provided in appropriate storage box painted red with lock and key and fastened to the floating pontoon and the same shall be as approved by the EIC.		"Additional arrangements: The floating pontoon shall be equipped with 30m lifeline rope and at least two (2) first aid kits. All items shall be provided in appropriate storage box painted red with lock and key and fastened to the floating pontoon and the same shall be as approved by the EIC. The floating pontoon shall be equipped with PVC roofing with structural design approved by IIT/NIT."
37.	Part-2 Technical Specification Clause 3 Page:90	"Approach trestle / gangway: The gangway proposed is a floating type of HDPE material with all the aforesaid specifications. The broad dimensions are tabulated below Breadth Overall: At least. 2.0m Length (approx.): Approx. 9m (3mX3 piece(s)) Free Board Minimum: 50% of floating gangway base shall be above water at all times"	Please provide the thickness and dimensions of the pipes to be used in making the frames. The HDPE Cubes to be used in gangway are same as that in the jetty?	Tender Conditions Prevail.
38.	Part-2 Technical Specification Clause 4 (a) Page:90	"floating pontoon jetty (15mX4.5m) of HDPE material including tensile PVC roofing and allied civil works, provision for lighting arrangement, lifesaving appliances (lifebuoys and life jackets), complete in all respect including inspection and certification by IRS or any other recognized organization and as per the terms & conditions of the Contract"	How many Life Jackets and Rings to be supplied?	Minimum: i) Life Buoys: 5 nos. ii) Life Jacket: 5 nos.